

REMARKS

Reconsideration of the above-identified application in view of the foregoing amendments and following remarks is respectfully requested.

A. Status of the Claims and Explanation of Amendments

Claims 1, 4-10, 12-15, 17-19, 22-24, 26-35, 38, 61 and 84 are pending, among which claims 1 and 12-14 are in independent form. All claims stand rejected under 35 U.S.C. § 103(a) as being unpatentable over cited references.

By this paper, claims 1, 4 and 12-14 are amended.

Claim 1 is amended to recite a data management method comprising a reception step, a select step, and a storage step, wherein the select step “mak[es] the server automatically select data servers for storing the data from the plurality of data servers, the selected data servers being different from each other and including at least a first data server and a second data server, said first data server being located in an area which is different from an area of user's address registered by the user of the client terminal, said second data server being located in an area with a disaster rate of occurrence equal to or smaller than a predetermined threshold”. Support for the amendment can be found throughout the application including, for example, step S14 disclosed in Fig. 2 with the associated text as follows.

“In step S14, the control server 111 selects a data server that stores user data from the data servers 112 with reference to the data server profile shown in FIG. 6. In this embodiment, the control server 111 can select two data servers. For this purpose, the control server 111 acquires the registered address of the user (member) who issued the storage request with reference to his or her member profile.

The control server 111 selects one data server located in an area or place such as a prefecture, city, or the like other than the registered address of the user with reference to the data server profile, and

sets the selected data server as a data server (A) which serves as a storage destination of the user data. Then, the control server 111 selects one data server present in an area or place, the previously acquired predicted disaster rate of occurrence of which is equal to or smaller than a predetermined threshold value, from all the data servers 112, and sets that selected data server as a data server (B) which serves as another storage destination of the user data.” (Specification at p.18 lines 1-21).

Claims 4 and 12-14 are similarly amended and supported at least by the above-stated description from the application.

Accordingly, no new matter will be introduced by this paper. Entry of the amendment is respectfully requested.

- B. Claims 1, 4-10, 12-15, 17-19, 22-24, 26-35, 38, 61 and 84 are patentable over the cited references.

Claim 1 is rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,799,147 to Shannon (“Shannon”) in view of U.S. Patent No. 5,764,903 to Yu (“Yu”). Applicant respectfully traverses the rejection.

The Office Action takes the position that “[S]hannon teaches a data management method using a network system which includes a server, a client terminal and a plurality of data servers, comprising: the reception step of making the server receive a users’ data storage request and data to be stored from the client terminal (See Shannon, col. 4, line 65 to col. 5, line 16); the selected data servers including a data server located in an area which is different from an area of user’s address registered by the user of the client terminal (see Shannon, col. 7, lines 1-5), and a data server located in an area with a low disaster rate of occurrence (see Shannon, col. 3, lines 38-61”. (08/28/2006 Office Action at p. 2). Then it’s noted in the Office Action that “[a]ny remote physical location can serve the purpose of an area with a low disaster rate of occurrence

since the remote location is not subject to the same physical condition or hazards)” (08/28/2006 Office Action at p.2-3). However, it is conceded in the Office Action that Shannon fails to teach a select step of making the server automatically select data servers for storing the data and a storage step of making the server send the data to the selected data servers. Then Yu is introduced in the Office Action to remedy the deficiency. In particular, “[Y]u teaches a select step of making the server automatically select data servers for storing the data from the plurality of data servers (see Yu, col. 5, lines 25-35); and a storage step of making the server send the data to the selected data servers. (see Yu, col. 5, lines 36-49)” (08/28/2006 Office Action at p. 3).

Applicant disagrees with the characterization of the present invention, and therefore amends claim 1 to read as follows:

1. A data management method using a network system which includes a server, a client terminal and a plurality of data servers, comprising:
 - a reception step of making the server receive a user's data storage request and data to be stored from the client terminal;
 - a select step of making the server automatically select data servers for storing the data from the plurality of data servers, the selected data servers being different from each other and including at least a first data server and a second data server, said first data server being located in an area which is different from an area of user's address registered by the user of the client terminal, said second data server being located in an area with a disaster rate of occurrence equal to or smaller than a predetermined threshold; and
 - a storage step of making the server send the data to the selected data servers, and store the data in the selected data servers.

One of the aspect of the present invention, as recited in the amended claim 1, is the select step that “automatically select[s] ... a first data server and a second data server, said first data server being located in an area which is different from an area of user's address registered by the user of the client terminal, said second data server being located in area with a

disaster rate of occurrence equal to or smaller than a predetermined threshold". This feature, however, is not taught, disclosed or suggested in either of the cited references.

Shannon is directed to a computer recovery backup method that periodically updates information on hard disks in a personal computer with a remote server computer. According to Figs. 1 and 2 illustrated in Shannon, initiating the client computer 12 takes place at point 16 followed by network starting at point 26. The network link with the server computer system 14 occurs at point 28, commencing the log-on for the updating and copying of the modified files and the updated disk map to the server computer. The server computer 14 receives the log-on information and updates the file and accepts the logical disk map file. "[A]t this point, after notifying the client computer, step 38 consists of updating the client disk image with the files in the disk data cache of the server computer." Under the circumstance shown in Fig. 2 where two computer servers are engaged, the first computer server then transfers the information from the first server disk data cache 58 to the second server computer system disk data cache 64. Then files on the client computer are removed, and the whole backup process is completed. (Shannon, col. 4 line 54 to col. 5 line 29).

Apparently, Shannon does not teach or disclose the element and limitation "[selecting] data servers for storing the data from the plurality of data servers, the selected data servers being different from each other and including at least a first data server and a second data server, said first data server being located in an area which is different from an area of user's address registered by the user of the client terminal, said second data server being located in an area with a disaster rate of occurrence equal to or smaller than a predetermined threshold" as recited in the amended claim 1. Applicant notes that Shannon does not specifically teach the server computer(s) to be located in an area which is different from an area of user's address

registered by the user of the client terminal. Even if the computer server is placed in an area different from the user's registered address, Shannon still fails to teach to "[select] a second data server...located in an area with a disaster rate of occurrence equal to or smaller than a predetermined threshold". It is alleged in the Office Action that "any remote physical location can serve the purpose of an area with a low disaster rate of occurrence since the remote location is not subject to the same physical condition or hazards". Applicant hereby disagrees with the assertion. At best, any remote physical location can serve the purpose of an area with a different disaster rate of occurrence if the remote location is not subject to the same physical condition or hazards. Therefore, an area different from the user's registered address is not necessarily an area having a lower disaster rate of occurrence than that with the user's registered address.

Furthermore, to clarify the present invention, claim 1 is amended to recite to select a data server in "[a]n area with a disaster rate of occurrence equal to or smaller than a predetermined threshold". This limitation, nevertheless, is not taught, disclosed or suggested by Shannon at all.

Yu is directed to a method and system for mirroring or duplicating hard disk data over a network with very low network overhead. According to Figs. 3 and 4 of Yu, a virtual disk driver is provided between the operating system and the hard disk driver. After the virtual disk driver receives a disk write request that should be mirrored, the virtual disk driver first sends a disk write request to the secondary server, then sends the disk write request to a disk drive on the primary server. In the event data residing on one server is unavailable due to a system failure, the same data would still be available on the other server. However, Yu is unable to remedy the deficiency of what Shannon is lack of, i.e., automatically selecting a first data server located in an area which is different from an area of user's address registered by the user of the client

terminal and selecting a second data server located in an area with a disaster rate of occurrence equal to or smaller than a predetermined threshold.

Accordingly, since not all steps recited in claim 1 are taught, disclosed or suggested in the cited references, whether taken alone or in combination, claim 1 is asserted patentable over the cited references for at least the above-stated reasons.

Similarly, independent claims 12, 13 and 14 are asserted patentable over Shannon and Yu.

Claim 4, which is dependent upon claim 1, is rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Shannon and Yu and further in view of U.S. Patent Application Publication No. 2002/0095487 to Day et al. ("Day") and U.S. Patent No. 6,347,384 to Satomi et al. ("Satomi"). Rejection to claim 4 is respectfully traversed.

Claim 4, as amended, recites:

4. The method according to claim 1, further comprising:
a step of making the server acquire disaster information from a disaster information database that provides disaster information, and search for the area with a disaster rate of occurrence equal to or smaller than a predetermined threshold on the basis of the acquired disaster information for selecting the server in the select step.

The Office Action takes the position that (1) "[S]hannon and Yu teach the mentioned limitations of claim 1 above"; and (2) although "[Shannon and Yu] fail to teach a method further comprising a step of making the server acquire disaster information from a disaster information database...", "[S]atomi teaches a method further comprising a step of making the server acquire disaster information from a disaster information database that provides disaster information (See Satomi, col. 2, lines 28-50) ...and Day teaches search for a server for selecting the server in the select step" (08/28/2006 Office Action at p. 3-4).

Without restating the reasons with respect to rejection to claim 1, Applicant further notices that Satomi and Day fails to teach, disclose or suggest the limitation as recited in amended claim 4, especially, “search[ing] for the area with a disaster rate of occurrence equal to or smaller than a predetermined threshold on the basis of the acquired disaster information for selecting the server in the select step”.

Satomi is directed to system for providing reliable and effective disaster relief due to the network damage or communication restriction arising out of the occurrence of a disaster, etc. According to Satomi, the disaster relief system comprises a plurality of server apparatus 2, a plurality of portable terminal equipment 1, and communication networks 20, 30 of different types to which both the portable terminal equipment 1 and the server apparatus 2 can be connected. The portable terminal equipment 1 accesses an available server apparatus 2 over an available communication network and obtains disaster relief information and resources information corresponding to damaged resources to create or update a disaster relief plan file 5, and extracts the necessary information from the disaster relief information DB 3.

As illustrated in Figs. 1, 2, 3 and 4, the disaster relief information DB 3 is a database for storing the information about a relief plan for the disaster, the resource information DB 4 stores information about routes for making arrangements for relief of the damaged facilities. The disaster relief information DB 3 includes a list of all items 31 that are to be dealt within event of a disaster and a list of various departments responsible for providing disaster relief for the corresponding item 31. Damage status 33 lists different degrees of damage to each item 31. For each item 31, the number of persons 34 need for providing relief, and starting date 35, and an anticipated number of days 36 for each damage status 33 are set. (Satomi, col. 3 lines

51-65). Similar structures can be found in resource information DB 4 and disaster relief plan file 5. (Satomi, col. 3 line 66 to col. 4 line 19).

It is respectfully asserted that the “disaster rate of occurrence” as recited in claim 4 can not be obtained from disaster information acquired from disaster relief information DB or resource information DB 4 or disaster relief plan file 5 as taught or disclosed in Satomi. Apparently, Satomi teaches a system to provide disaster relief after a disaster occurs. According to the application, a disaster rate of occurrence refers to a predicted rate at which a variety of disasters including, for example, typhoon, earthquake, and the like, take place. From the data structure disclosed in Satomi, there is no way to obtain the disaster rate of occurrence in different areas. Without possession of the rate, an area with disaster rate of occurrence equal to or smaller than a predetermined threshold can not be selected either. Therefore, Satomi in fact can not teach or suggest use disaster information database to obtain the disaster rate of occurrence of different areas, and thus can not teach to select an area with a disaster rate of occurrence equal to or smaller than a predetermined threshold.

Day is directed to a system capable of registering, locating and identifying network servers within a data center containing many such servers. In particular, Day teaches a method to use unique barcode ID to identify a specific server. At best Day teaches to find a server corresponding to a certain ID number, and nothing more. In other words, Day can not remedy the deficiency of what Satomi is lack of, i.e., to obtain a disaster rate of occurrence of an area and search for areas with a disaster rate of occurrence equal to or smaller than a predetermined threshold.

Accordingly, the limitation recited in claim 4 is not taught, disclosed or suggested in Satomi or Day. In light of reason for traversing rejection to claim 1 mentioned above, claim 4 is asserted patentable over Shannon in view of Yu, Satomi and Day.

Similarly, dependent claims 7, 9-10 and 38 are asserted patentable over Shannon in view of Yu, Satomi and Day.

Claims 5 and 6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Shannon and Yu and further in view of U.S. Patent No. 5,189,020 to Beeler, Jr ("Beeler").

According to the Office Action, Beeler teaches a method further comprising a step of making the server encrypt the data and includes the step of making the server send the data encrypted by different methods to the respective data servers and store the data in the data servers. (08/28/2006 Office Action at p. 5).

Beeler is directed to a data replication techniques for computer operating systems, wherein a file modification request is sent to a primary server, which communicates to a secondary server, associated with which the file modification request is executed and saved in a storage media. However, Beeler fails to remedy the deficiency of what Shannon and Yu are lack, i.e., to find a first server in an area different from a user's registered address and a second server in an area with a disaster rate of occurrence equal to or smaller than a predetermined threshold.

Accordingly, for the above-stated reasons, claims 5 and 6 are asserted patentable over Shannon and Yu and further in view of Beeler. Similarly, claim 8 is asserted patentable over Shannon and Yu and further in view of Beeler.

For the similar reasons, Applicant has not specifically addressed the rejections of the rest dependent claims. Applicant respectfully submits that the independent claims, from

which they depend, are in condition for allowance as set forth above. Accordingly, the dependent claims also are in condition for allowance. Applicant, however, reserves the right to address such rejections of the dependent claims in the future as appropriate.

CONCLUSION


For the above-stated reasons, this application is respectfully asserted to be in condition for allowance. An early and favorable examination on the merits is requested. In the event that a telephone conference would facilitate the examination of this application in any way, the Examiner is invited to contact the undersigned at the number provided.

IN THE EVENT THAT AN EXTENSION OF TIME IS REQUIRED, OR WHICH MAY BE REQUIRED IN ADDITION TO THAT REQUIRED IN A PETITION FOR AN EXTENSION OF TIME, THE COMMISSIONER IS HEREBY AUTHORIZED TO CHARGE ANY ADDITIONAL FEES WHICH MAY BE REQUIRED FOR THE TIMELY CONSIDERATION OF THIS AMENDMENT UNDER 37 C.F.R. §§ 1.16 AND 1.17, OR CREDIT ANY OVERPAYMENT TO DEPOSIT ACCOUNT NO. 13-4500, ORDER NO. 1232-4812.

Respectfully submitted,
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